

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081720\
 Data File : VL035430.D
 Acq On : 17 Aug 2020 23:47
 Operator : SY/AP
 Sample : L3510-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100

Quant Time: Aug 18 06:53:39 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 17 19:28:30 2020
 QLast Update : Mon Aug 17 19:28:30 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1082037	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	4723072	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	4690186	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	3467994	10.56	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.60%

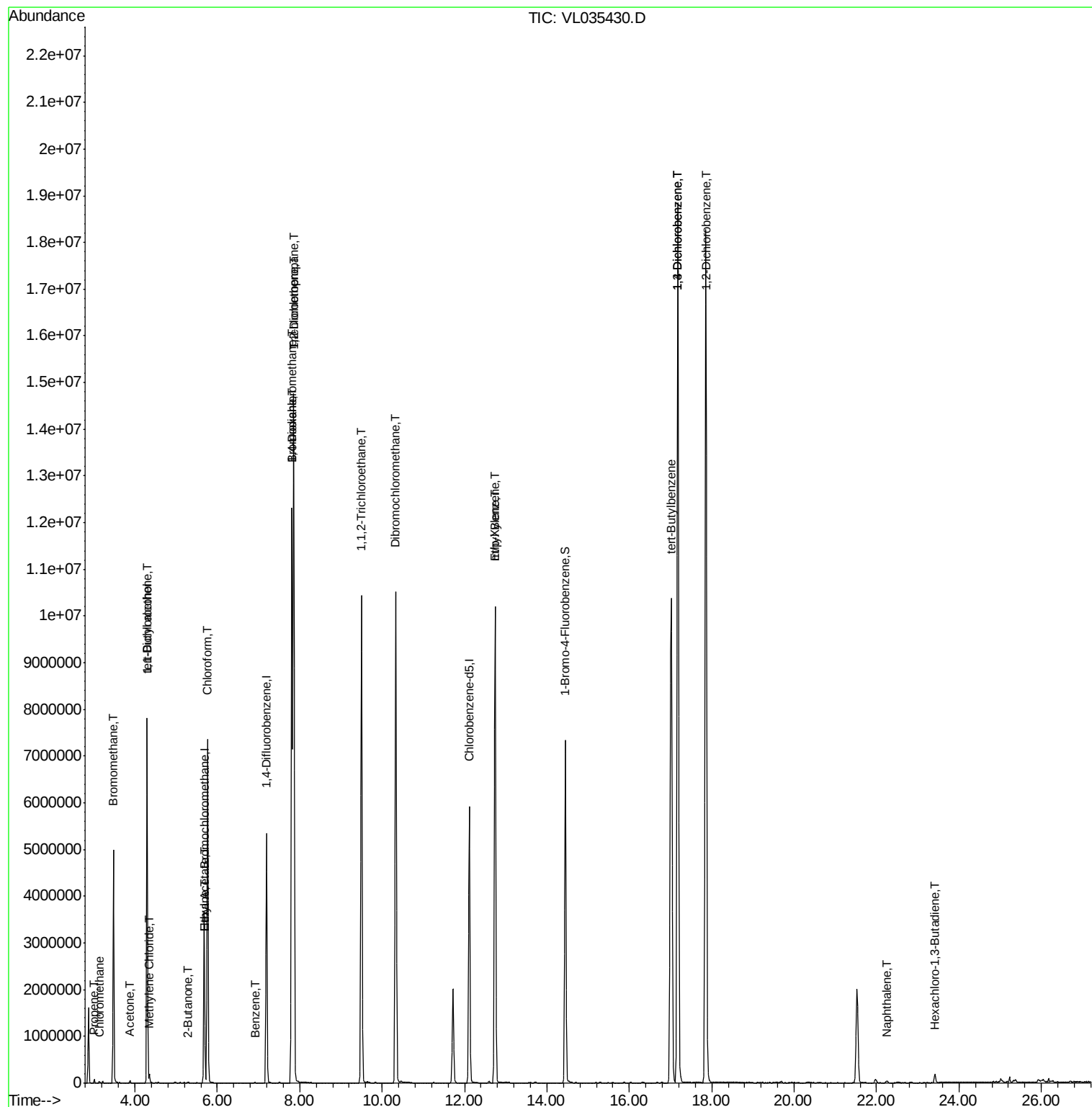
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
4) Chloromethane	3.14	50	3272	0.046	ppbv #	83
6) Bromomethane	3.47	94	2640320	35.741	ppbv	99
9) Propene	3.01	41	3979	0.073	ppbv	92
15) Acetone	3.88	43	38835	0.312	ppbv #	66
17) tert-Butyl alcohol	4.29	59	144244	0.896	ppbv #	71
18) 1,1-Dichloroethene	4.29	96	2837331	27.404	ppbv #	57
20) Methylene Chloride	4.35	84	70130	0.698	ppbv #	63
25) Ethyl Acetate	5.70	43	16329	0.067	ppbv #	80
26) Hexane	5.70	57	25834	0.189	ppbv #	34
29) Chloroform	5.76	83	5257568	19.133	ppbv	90
34) 2-Butanone	5.28	43	17189	0.109	ppbv #	68
36) Benzene	6.91	78	16399	0.047	ppbv #	90
38) Trichloroethene	7.86	130	5663745	29.372	ppbv #	86
39) 1,2-Dichloropropane	7.85	63	16538	0.145	ppbv #	1
40) 1,4-Dioxane	7.82	88	3694	0.059	ppbv #	1
42) Bromodichloromethane	7.81	83	8424564	31.779	ppbv #	85
47) 1,1,2-Trichloroethane	9.50	97	4156645	24.358	ppbv	93
48) Dibromochloromethane	10.33	129	7218072	25.215	ppbv	97
58) Ethyl Benzene	12.74	91	9699566	17.131	ppbv #	65
59) m/p-Xylene	12.74	91	9699566	20.266	ppbv	99
65) tert-Butylbenzene	17.01	119	238005	0.321	ppbv #	23
75) 1,3-Dichlorobenzene	17.18	146	11604407	24.344	ppbv	92
76) 1,4-Dichlorobenzene	17.18	146	11604407	24.703	ppbv	92
77) 1,2-Dichlorobenzene	17.86	146	11360478	24.332	ppbv	92
78) Hexachloro-1,3-Butadiene	23.42	225	29621	0.080	ppbv #	19
79) Naphthalene	22.26	128	28416	0.033	ppbv	98

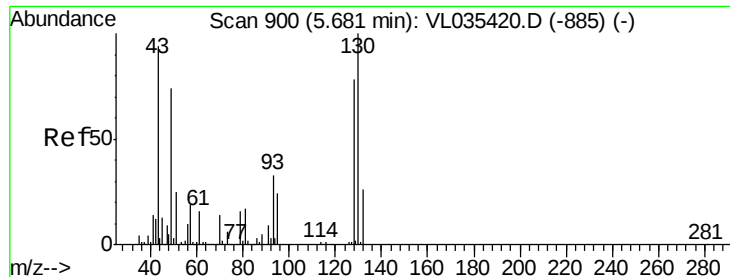
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081720\
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QLast Update : Mon Aug 17 19:28:30 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.01 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

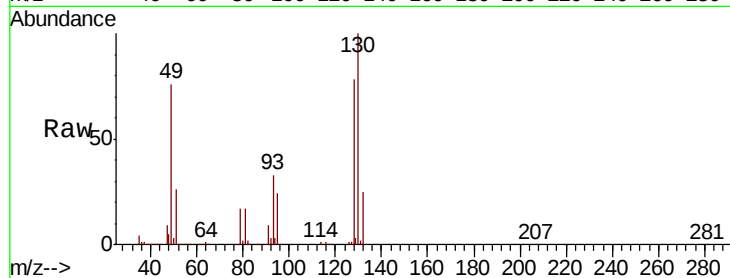
Tot Ion: 49 Resp: 1082037

Ion Ratio Lower Upper

49 100

128 101.6 20.9 62.7#

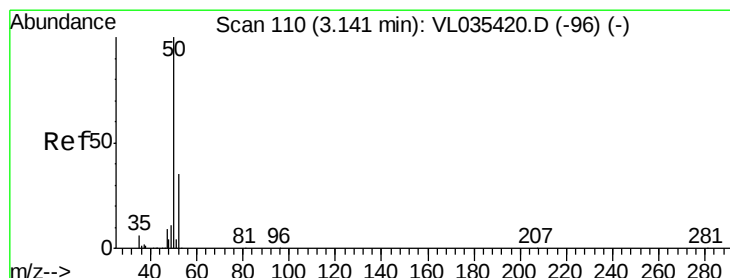
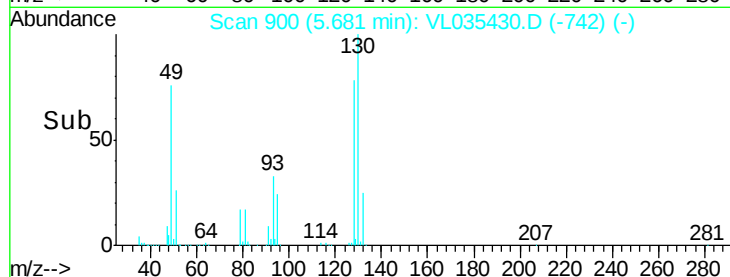
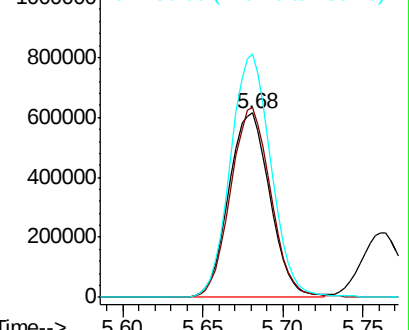
130 130.6 26.7 80.1#



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#4

Chloromethane

Concen: 0.046 ppbv

RT: 3.14 min Scan# 111

Delta R.T. 0.01 min

Lab File: VL035430.D

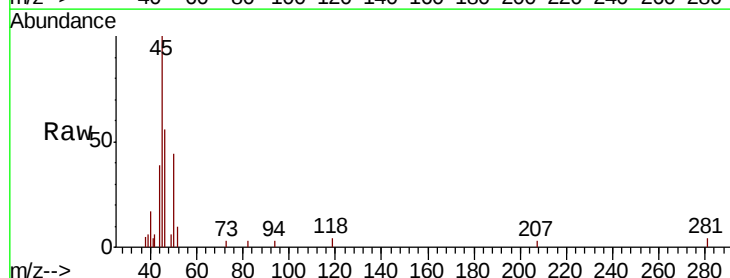
Acq: 17 Aug 2020 23:47

Tgt Ion: 50 Resp: 3272

Ion Ratio Lower Upper

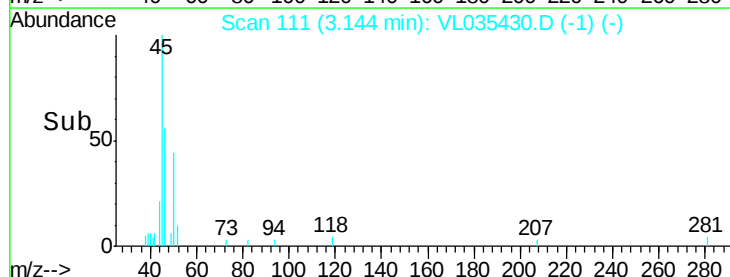
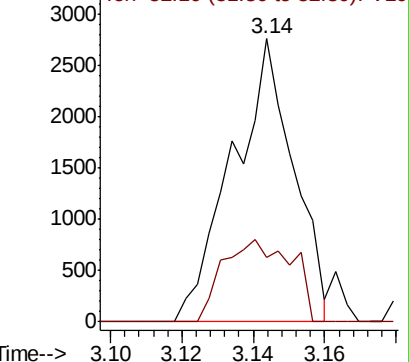
50 100

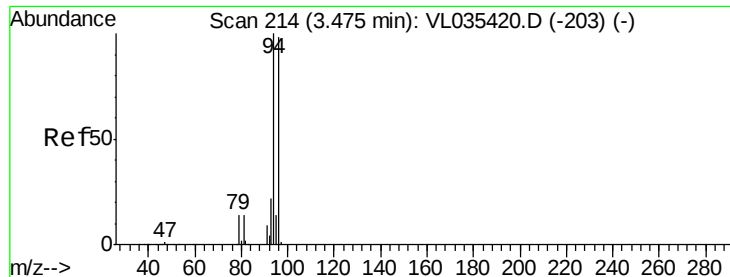
52 22.7 25.9 38.9#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#6

Bromomethane

Concen: 35.741 ppbv

RT: 3.47 min Scan# 214

Delta R.T. 0.01 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

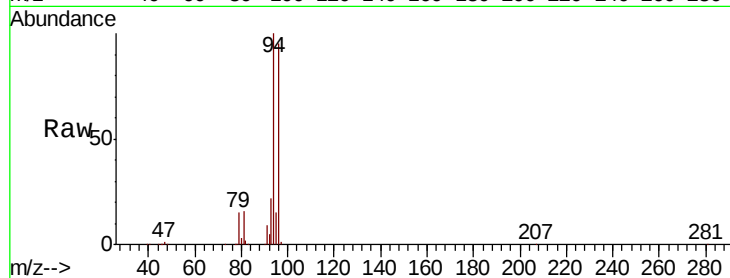
E053-1100

Tot Ion: 94 Resp: 2640320

Ion Ratio Lower Upper

94 100

96 95.2 75.0 112.6



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

3.47

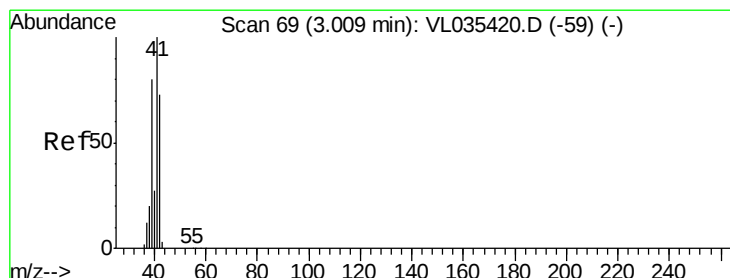
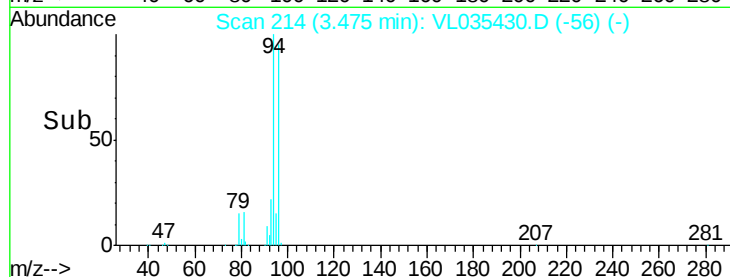
1500000

1000000

500000

0

Time-->



#9

Propene

Concen: 0.073 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.01 min

Lab File: VL035430.D

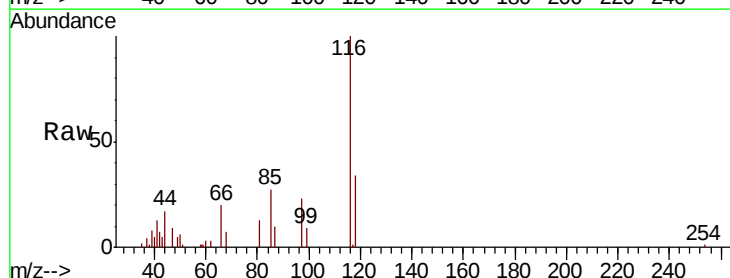
Acq: 17 Aug 2020 23:47

Tgt Ion: 41 Resp: 3979

Ion Ratio Lower Upper

41 100

42 62.6 55.5 83.3



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

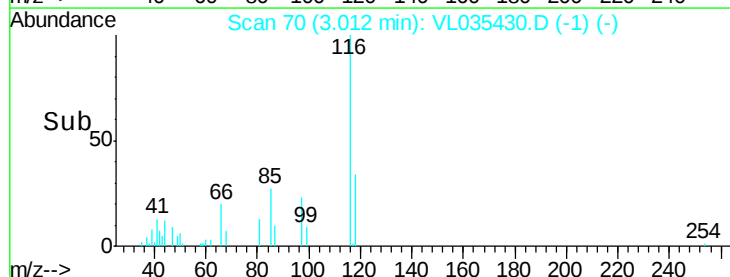
3000

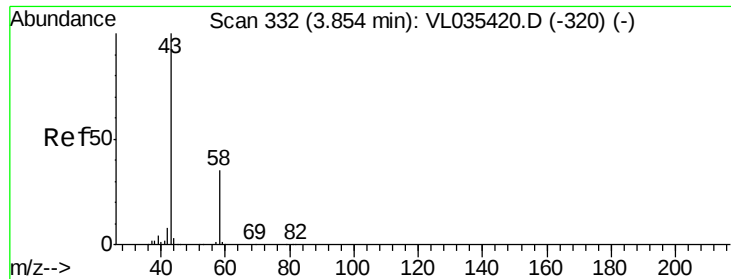
2000

1000

0

Time-->





#15

Acetone

Concen: 0.312 ppbv

RT: 3.88 min Scan# 339

Delta R.T. 0.03 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

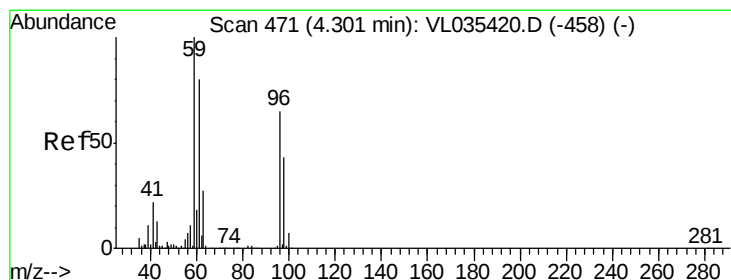
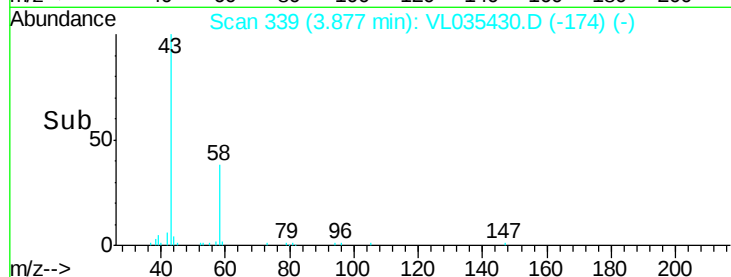
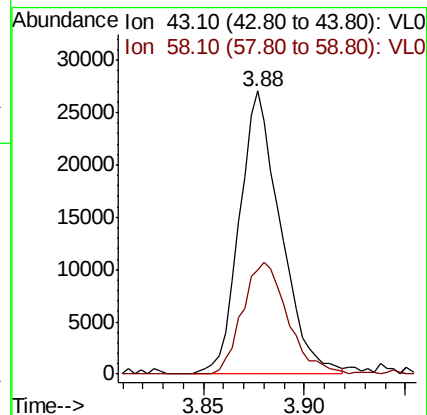
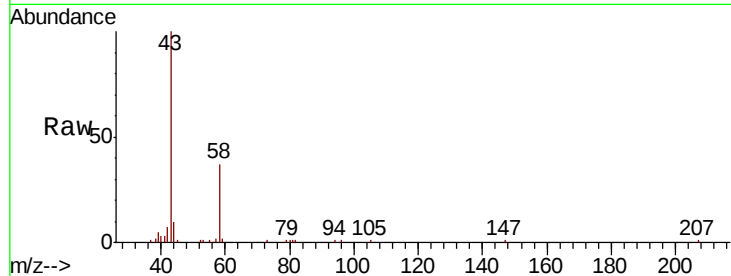
E053-1100

Tot Ion: 43 Resp: 38835

Ion Ratio Lower Upper

43 100

58 44.0 21.0 31.6#



#17

tert-Butyl alcohol

Concen: 0.896 ppbv

RT: 4.29 min Scan# 469

Delta R.T. 0.00 min

Lab File: VL035430.D

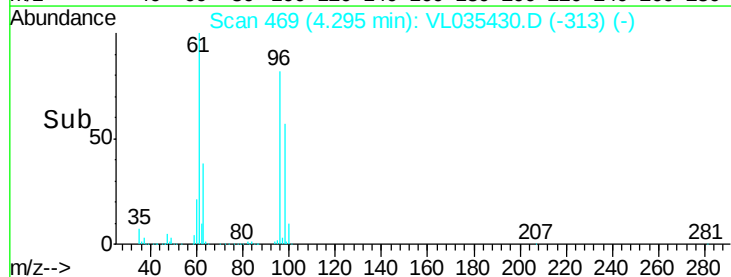
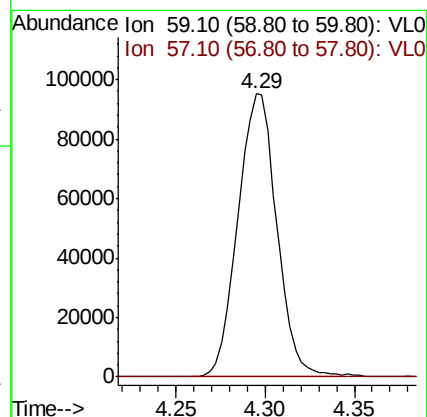
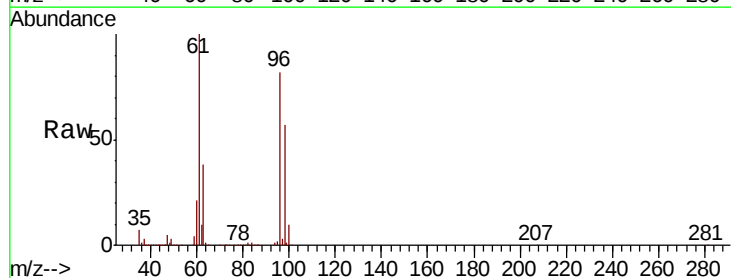
Acq: 17 Aug 2020 23:47

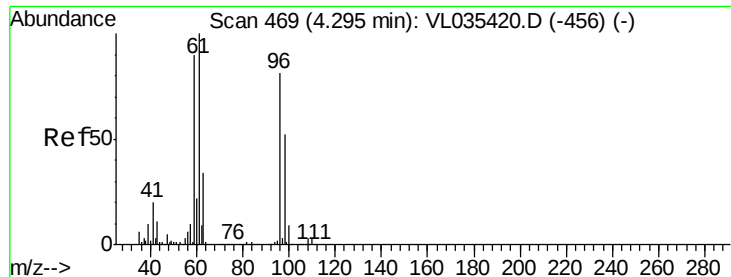
Tgt Ion: 59 Resp: 144244

Ion Ratio Lower Upper

59 100

57 0.1 8.9 13.3#

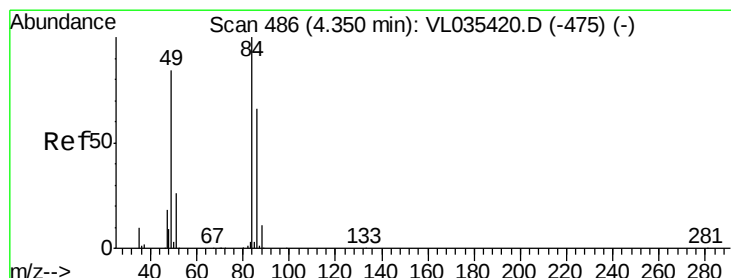
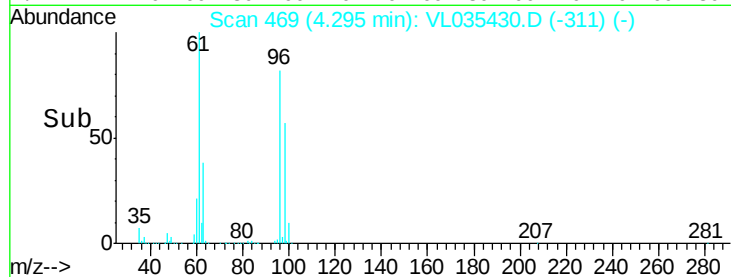
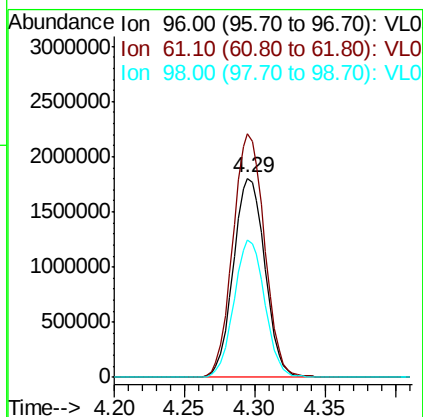
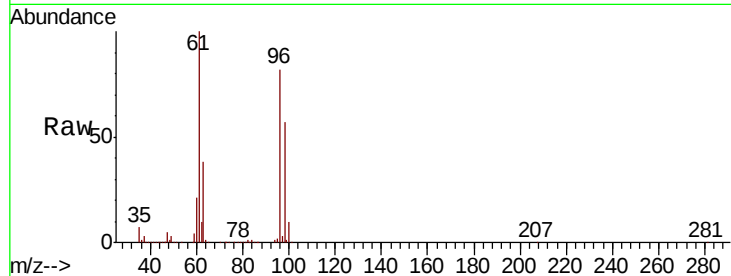




#18
 1,1-Dichloroethene
 Concen: 27.404 ppbv
 RT: 4.29 min Scan# 469
 Delta R.T. 0.01 min
 Lab File: VL035430.D
 Acq: 17 Aug 2020 23:47

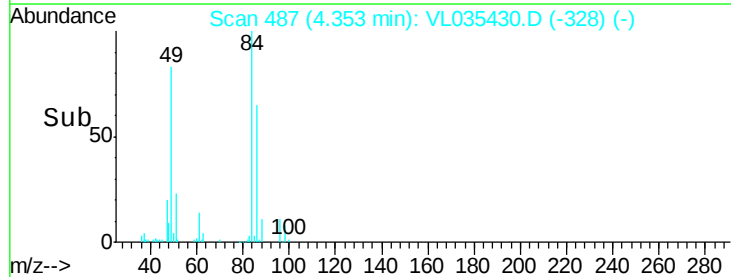
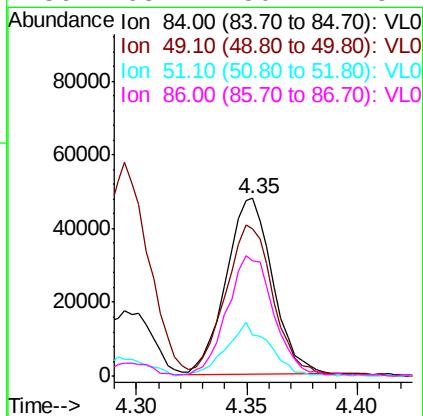
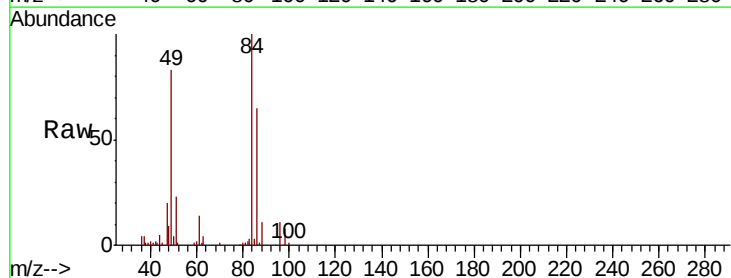
Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100

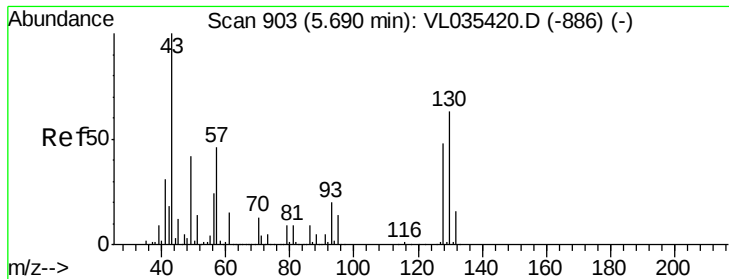
Tot Ion: 96 Resp: 2837331
 Ion Ratio Lower Upper
 96 100
 61 122.1 161.8 242.6#
 98 69.1 49.3 73.9



#20
 Methylene Chloride
 Concen: 0.698 ppbv
 RT: 4.35 min Scan# 487
 Delta R.T. 0.01 min
 Lab File: VL035430.D
 Acq: 17 Aug 2020 23:47

Tgt Ion: 84 Resp: 70130
 Ion Ratio Lower Upper
 84 100
 49 82.3 118.6 177.8#
 51 23.4 36.4 54.6#
 86 65.2 50.2 75.4





#25

Ethyl Acetate

Concen: 0.067 ppbv

RT: 5.70 min Scan# 906

Delta R.T. 0.02 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

Tot Ion: 43 Resp: 16329

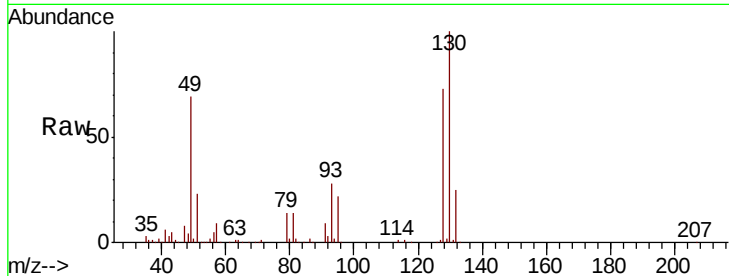
Ion Ratio Lower Upper

43 100

45 3.5 8.3 12.5#

61 1.6 7.6 11.4#

70 0.0 6.0 9.0#

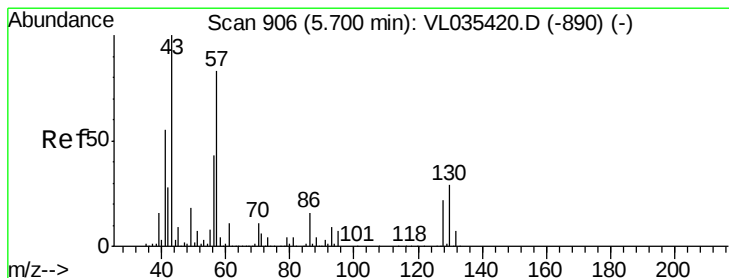
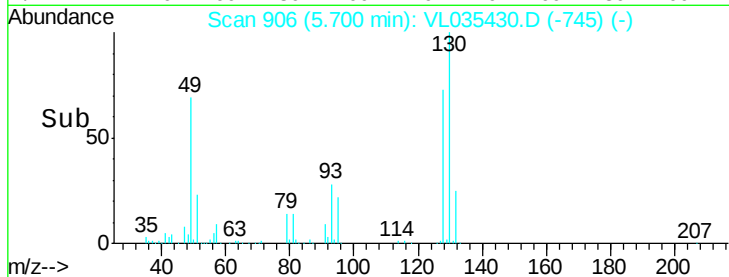
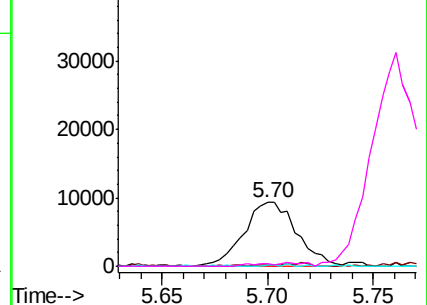


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 0.189 ppbv

RT: 5.70 min Scan# 906

Delta R.T. 0.01 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Tgt Ion: 57 Resp: 25834

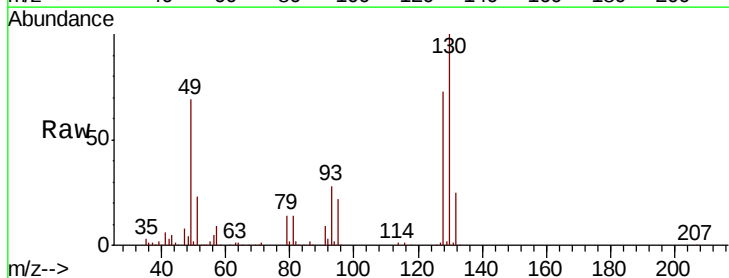
Ion Ratio Lower Upper

57 100

41 71.8 75.5 113.3#

43 65.3 181.7 272.5#

56 55.6 42.4 63.6

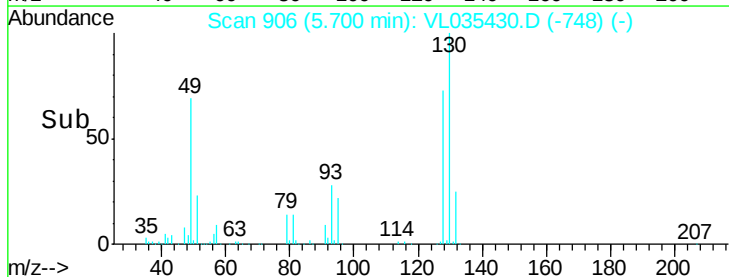
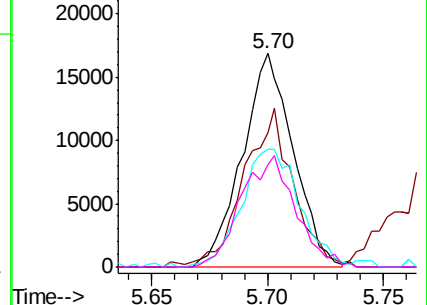


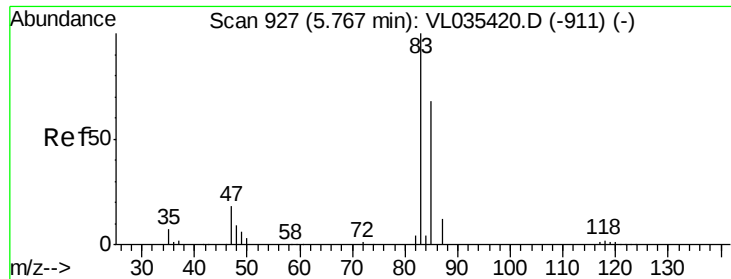
Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0

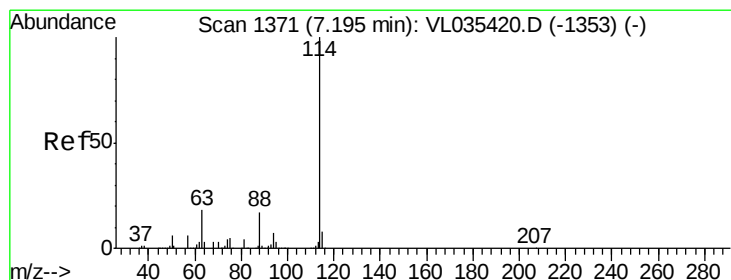
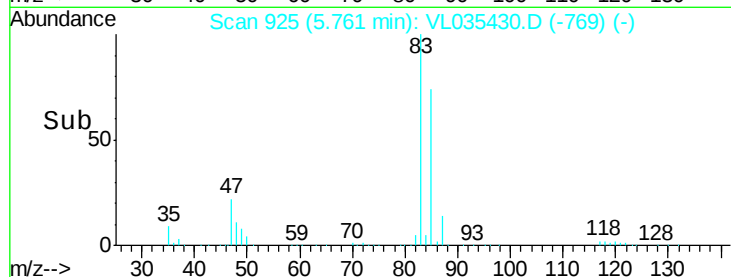
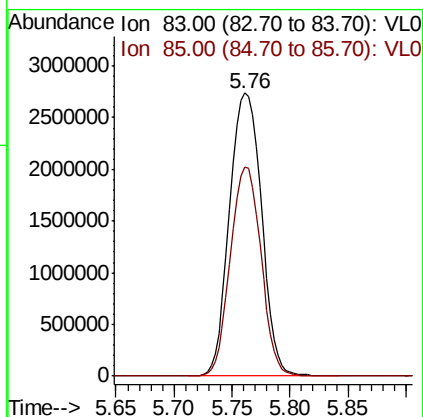
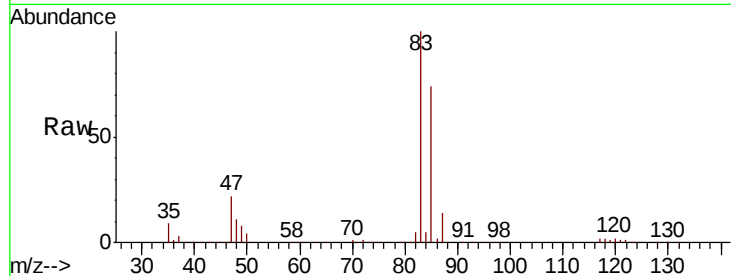




#29
Chloroform
Concen: 19.133 ppbv
RT: 5.76 min Scan# 925
Delta R.T. 0.00 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

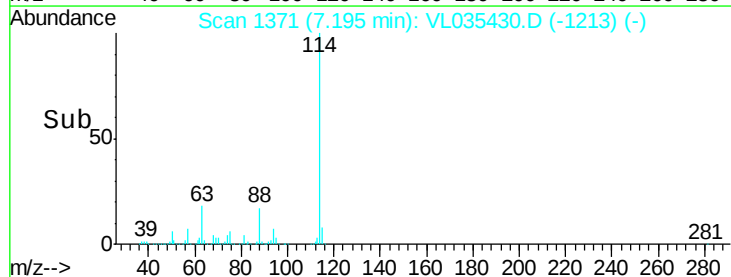
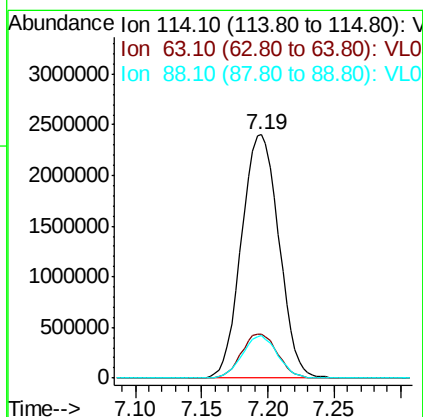
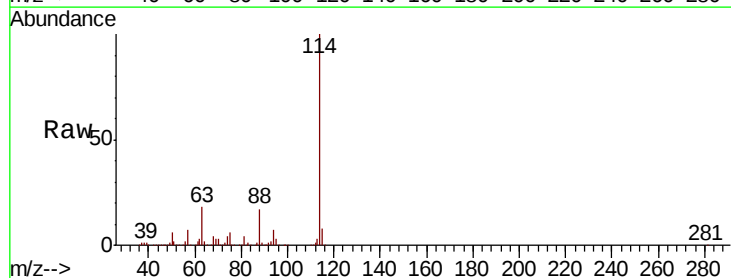
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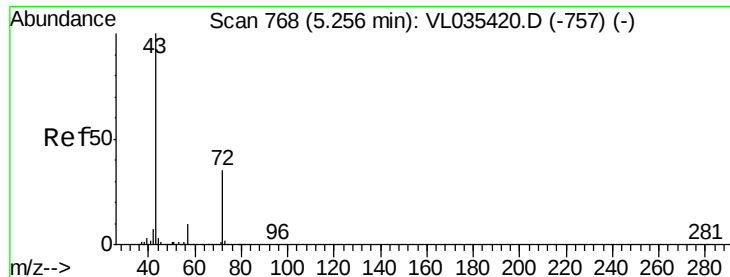
Tot Ion: 83 Resp: 5257568
Ion Ratio Lower Upper
83 100
85 74.0 52.7 79.1



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1371
Delta R.T. 0.01 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

Tgt Ion: 114 Resp: 4723072
Ion Ratio Lower Upper
114 100
63 17.6 23.1 34.7#
88 16.4 15.9 23.9





#34

2-Butanone

Concen: 0.109 ppbv

RT: 5.28 min Scan# 776

Delta R.T. 0.03 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

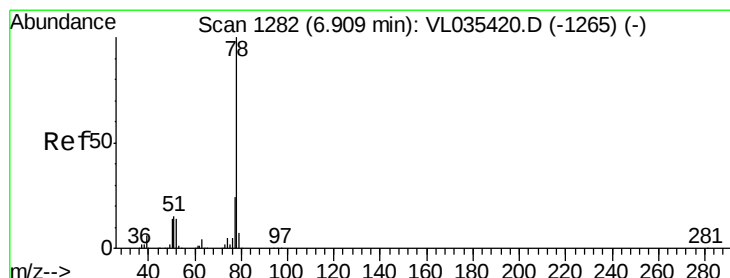
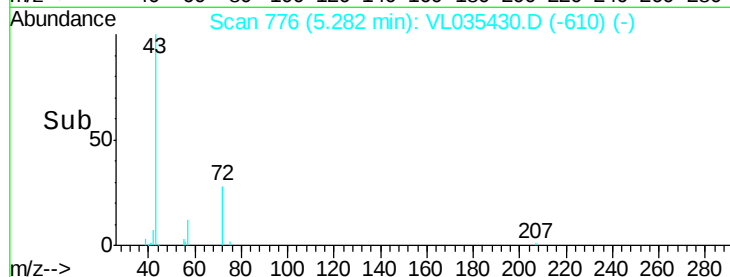
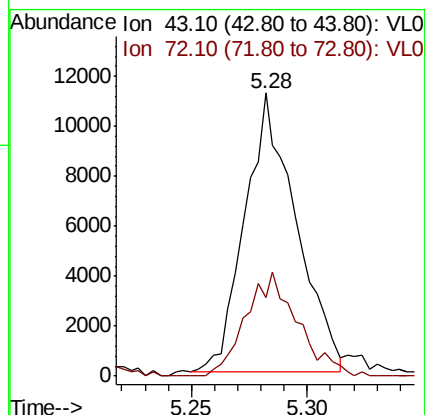
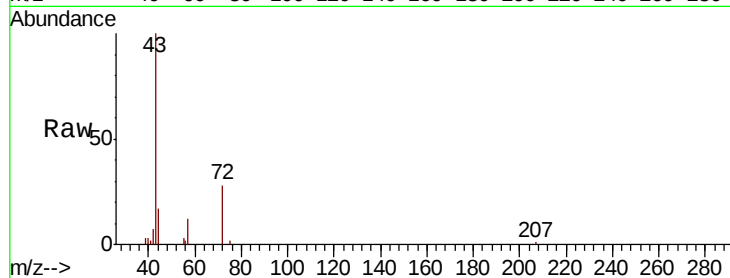
E053-1100

Tot Ion: 43 Resp: 17189

Ion Ratio Lower Upper

43 100

72 37.5 17.6 26.4#



#36

Benzene

Concen: 0.047 ppbv

RT: 6.91 min Scan# 1281

Delta R.T. 0.00 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

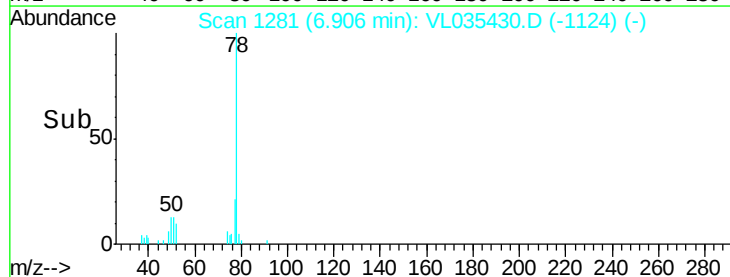
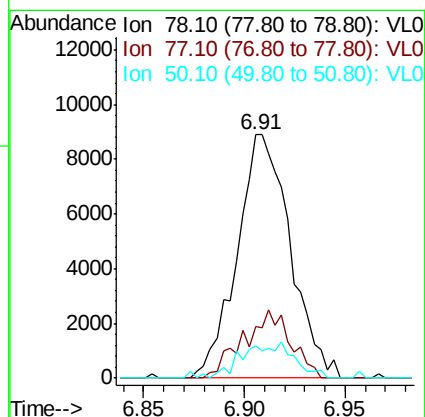
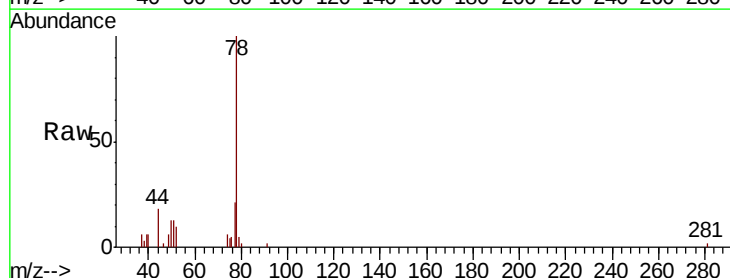
Tgt Ion: 78 Resp: 16399

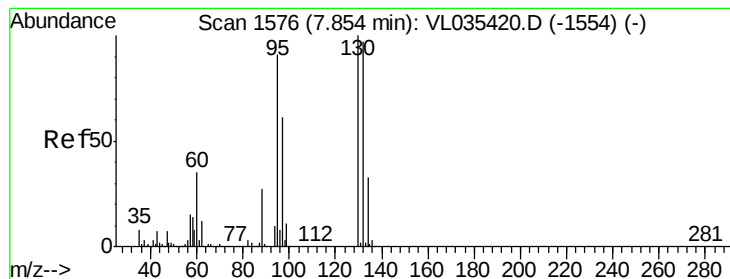
Ion Ratio Lower Upper

78 100

77 21.3 19.6 29.4

50 13.4 16.3 24.5#





#38

Trichloroethene

Concen: 29.372 ppbv

RT: 7.86 min Scan# 1577

Delta R.T. 0.01 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

Tot Ion:130 Resp: 5663745

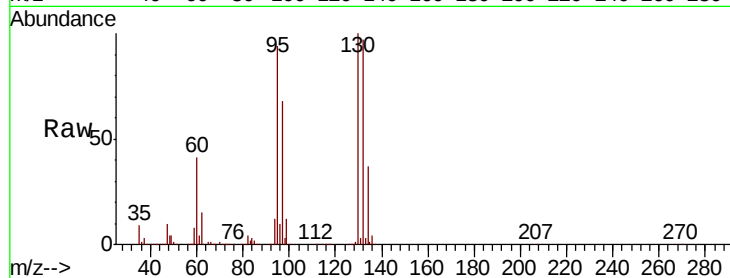
Ion Ratio Lower Upper

130 100

95 93.9 95.8 143.8#

132 97.4 74.3 111.5

97 67.7 62.6 94.0

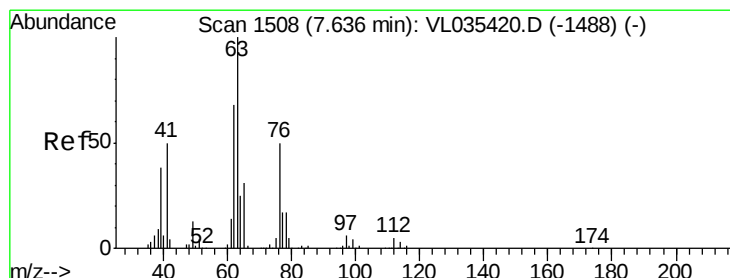
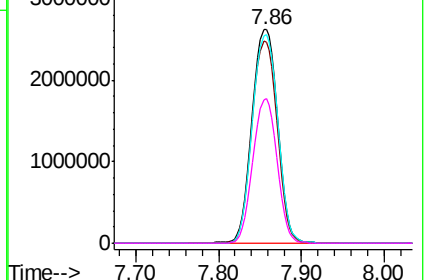
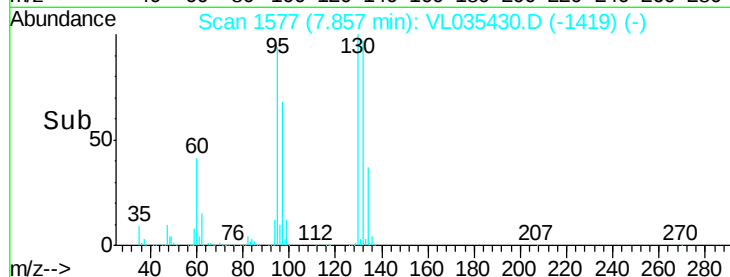


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 0.145 ppbv

RT: 7.85 min Scan# 1575

Delta R.T. 0.23 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

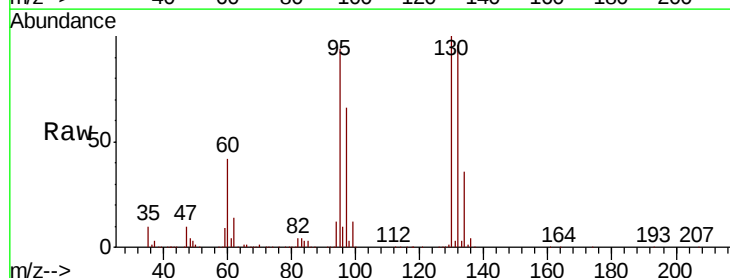
Tgt Ion: 63 Resp: 16538

Ion Ratio Lower Upper

63 100

41 5.9 61.1 91.7#

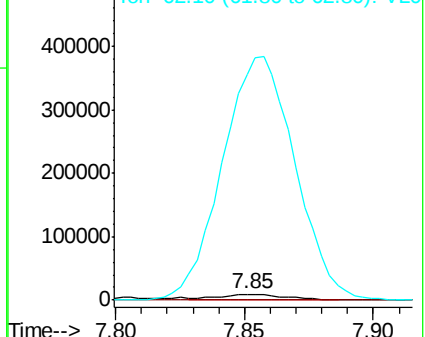
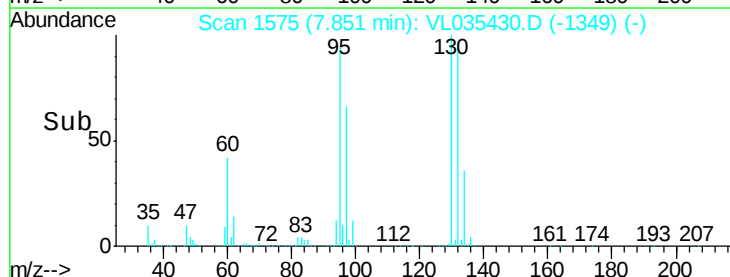
62 3660.2 55.3 82.9#

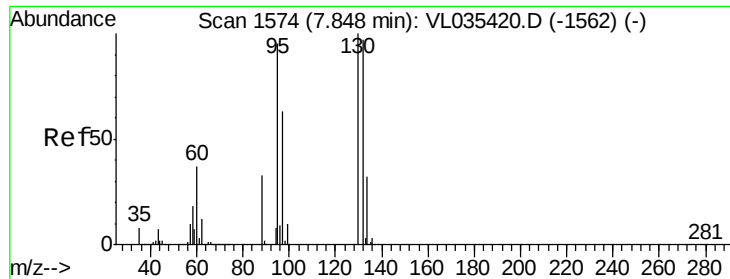


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0

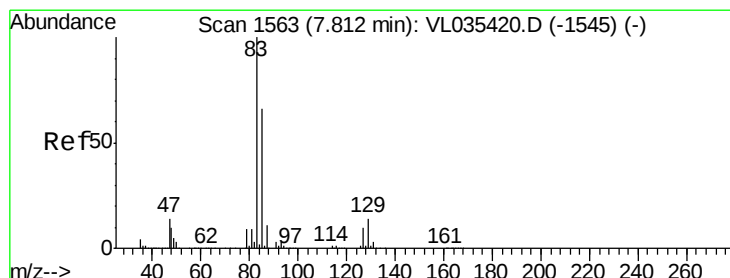
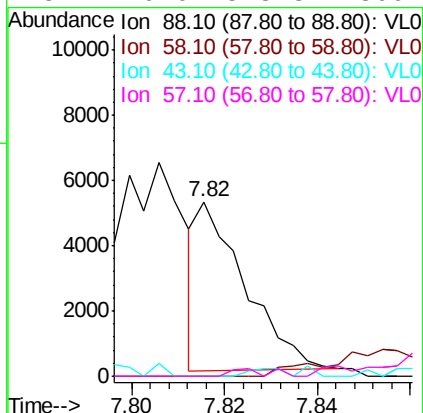
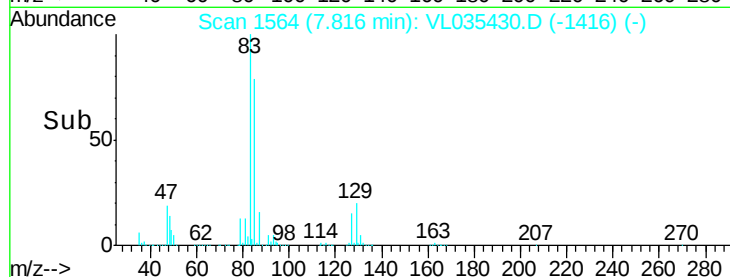
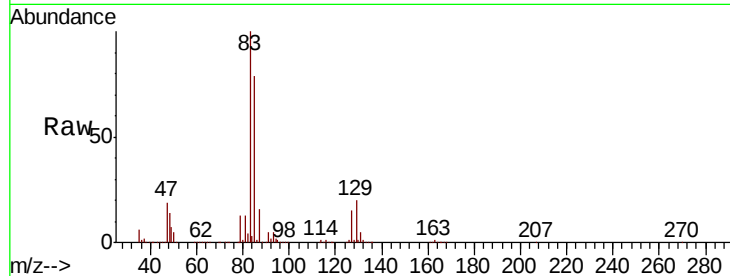




#40
1,4-Dioxane
Concen: 0.059 ppbv
RT: 7.82 min Scan# 1564
Delta R.T. -0.03 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

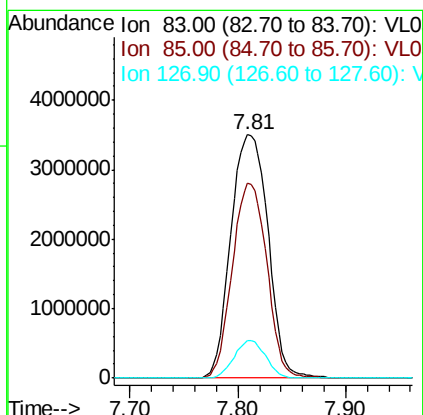
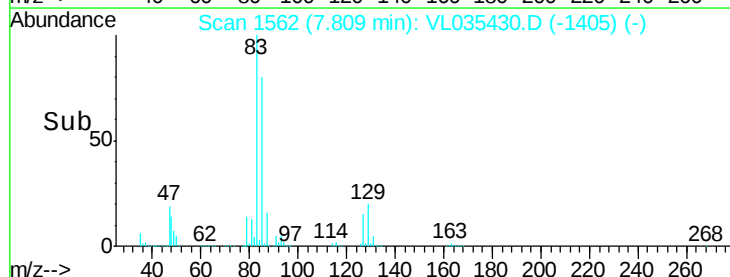
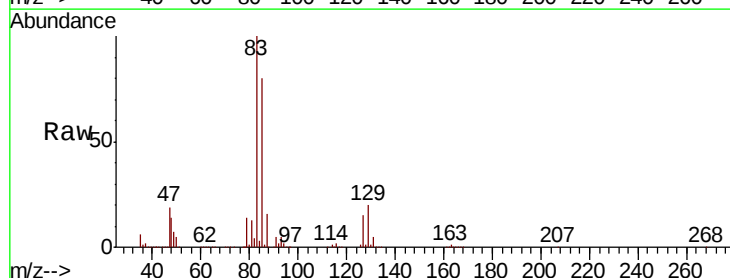
Instrument :
MSVOA_L
ClientSampleId :
E053-1100

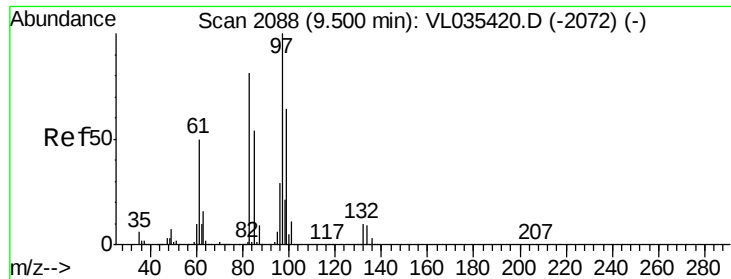
Tot Ion: 88 Resp: 3694
Ion Ratio Lower Upper
88 100
58 41.5 106.6 160.0#
43 5.0 209.7 314.5#
57 0.0 873.3 1309.9#



#42
Bromodichloromethane
Concen: 31.779 ppbv
RT: 7.81 min Scan# 1562
Delta R.T. 0.00 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

Tgt Ion: 83 Resp: 8424564
Ion Ratio Lower Upper
83 100
85 79.9 54.8 82.2
127 15.3 6.1 9.1#



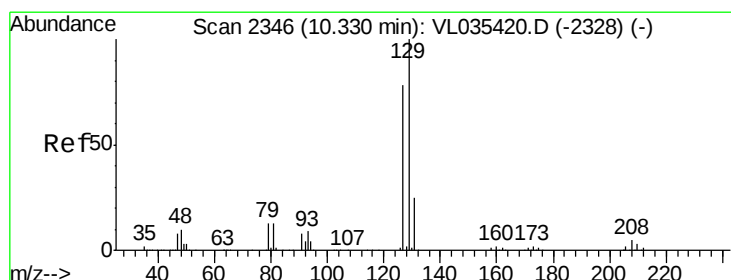
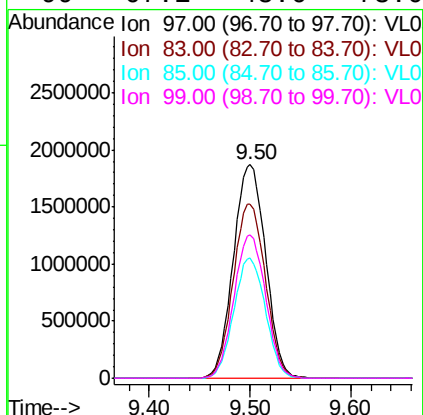
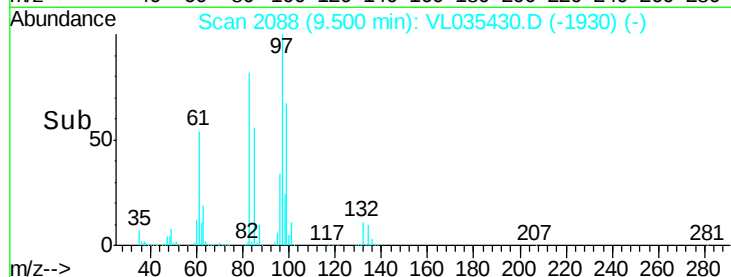
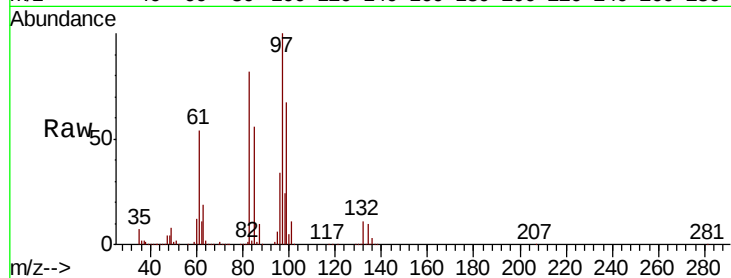


#47
 1,1,2-Trichloroethane
 Concen: 24.358 ppbv
 RT: 9.50 min Scan# 2088
 Delta R.T. 0.01 min
 Lab File: VL035430.D
 Acq: 17 Aug 2020 23:47

Instrument :
 MSVOA_L
 ClientSampleId :
 E053-1100

Tot Ion: 97 Resp: 4156645

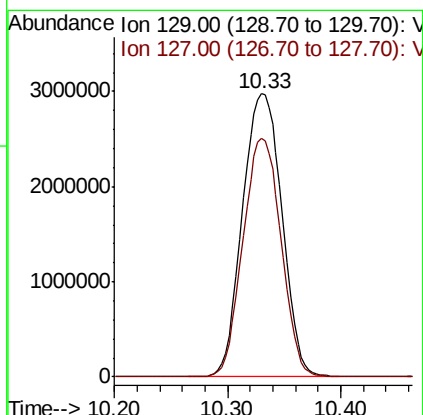
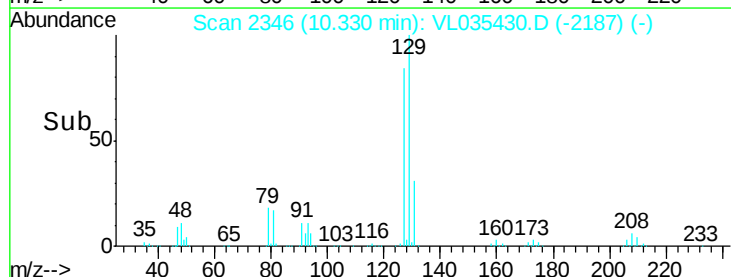
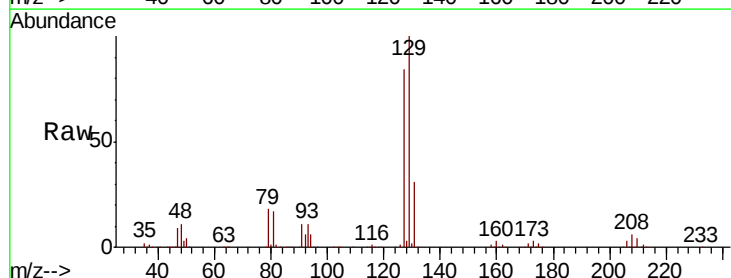
Ion	Ratio	Lower	Upper
97	100		
83	81.8	72.1	108.1
85	56.1	46.8	70.2
99	67.1	48.6	73.0

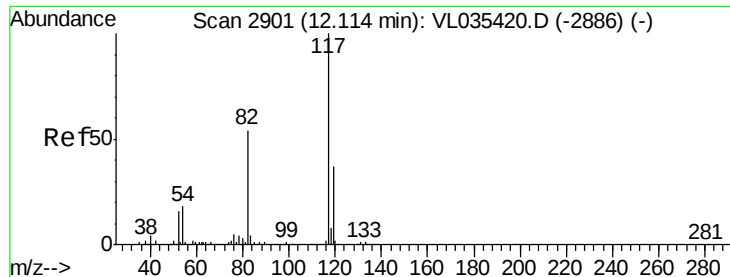


#48
 Dibromochloromethane
 Concen: 25.215 ppbv
 RT: 10.33 min Scan# 2346
 Delta R.T. 0.01 min
 Lab File: VL035430.D
 Acq: 17 Aug 2020 23:47

Tgt Ion: 129 Resp: 7218072

Ion	Ratio	Lower	Upper
129	100		
127	81.7	39.5	118.5

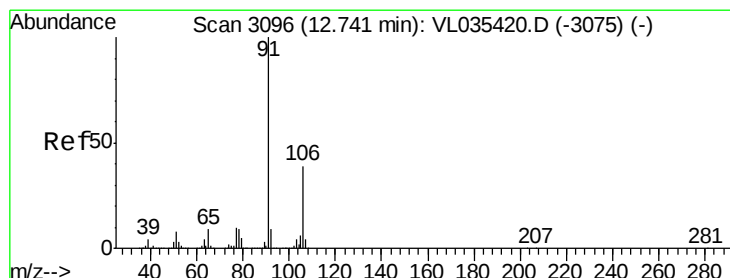
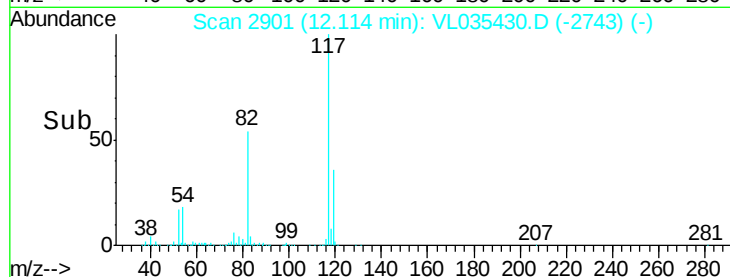
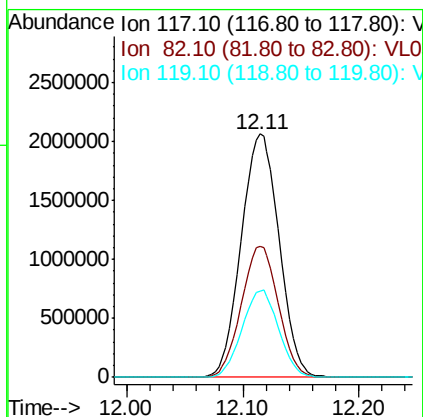
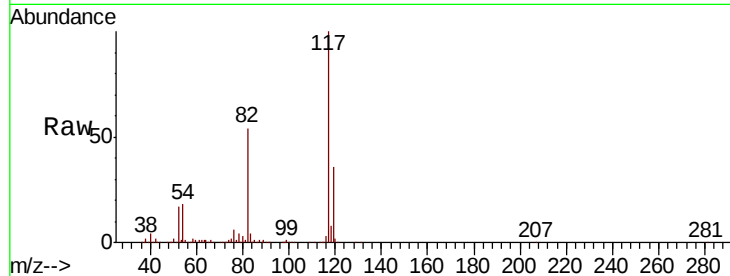




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2901
Delta R.T. 0.01 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

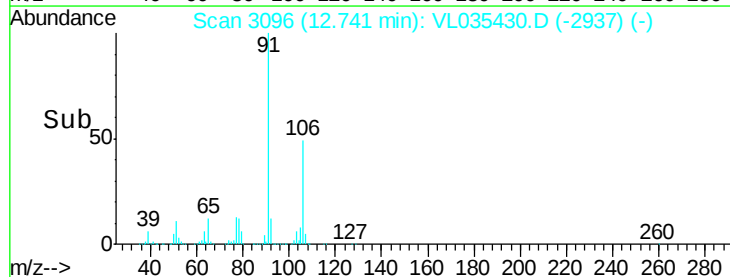
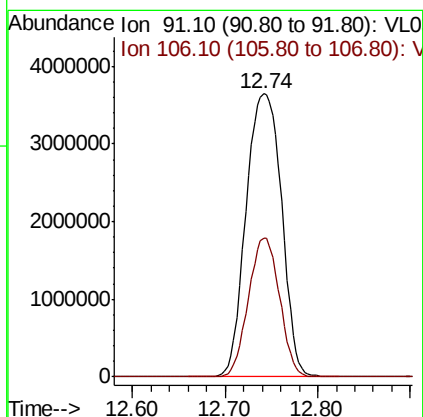
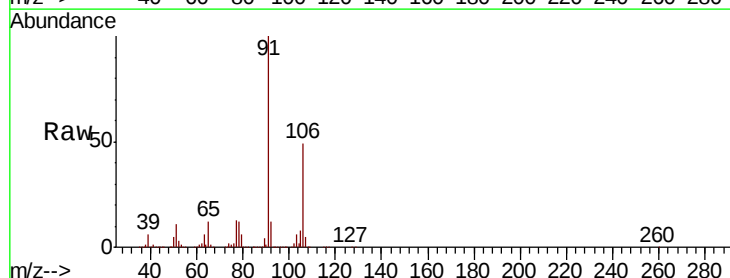
Instrument :
MSVOA_L
ClientSampleId :
E053-1100

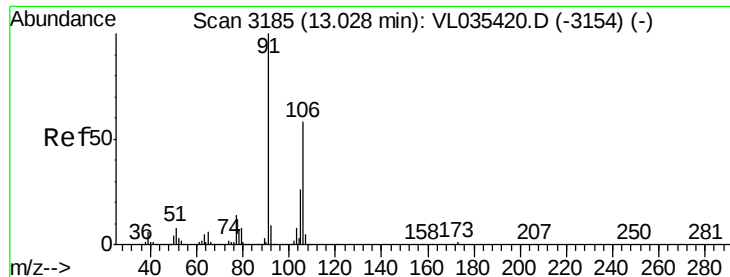
Tot Ion:117 Resp: 4690186
Ion Ratio Lower Upper
117 100
82 52.9 57.4 86.0#
119 34.7 28.4 42.6



#58
Ethyl Benzene
Concen: 17.131 ppbv
RT: 12.74 min Scan# 3096
Delta R.T. 0.01 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

Tgt Ion: 91 Resp: 9699566
Ion Ratio Lower Upper
91 100
106 49.0 24.1 36.1#





#59

m/p-Xylene

Concen: 20.266 ppbv

RT: 12.74 min Scan# 3096

Delta R.T. -0.28 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

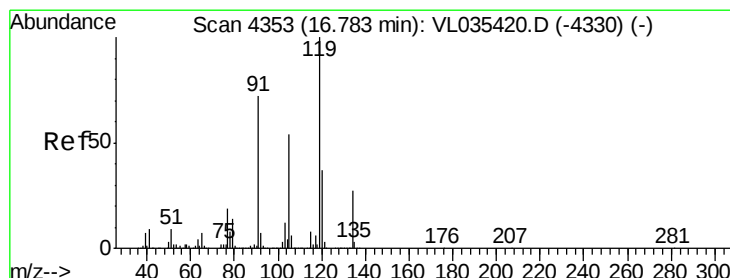
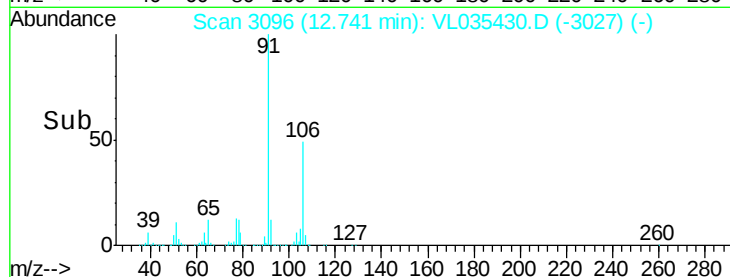
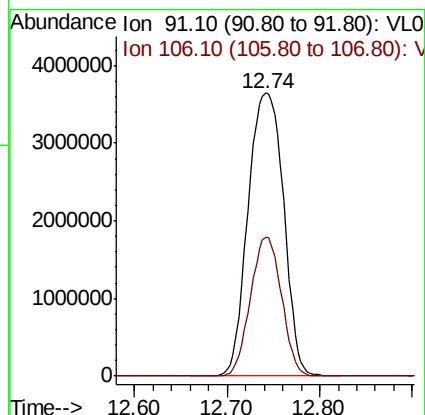
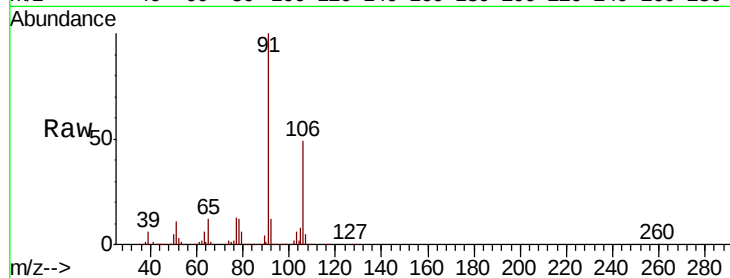
E053-1100

Tot Ion: 91 Resp: 9699566

Ion Ratio Lower Upper

91 100

106 43.0 34.0 51.0



#65

tert-Butylbenzene

Concen: 0.321 ppbv

RT: 17.01 min Scan# 4424

Delta R.T. 0.24 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

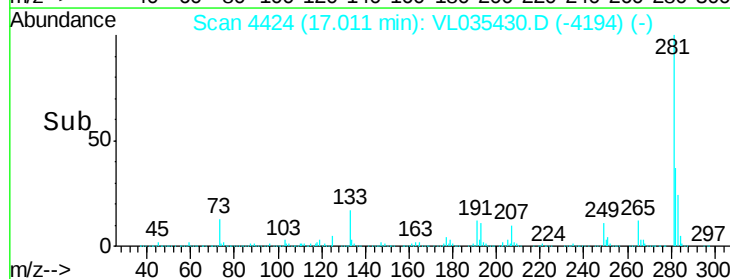
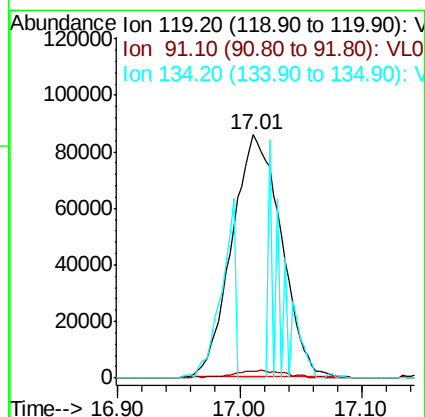
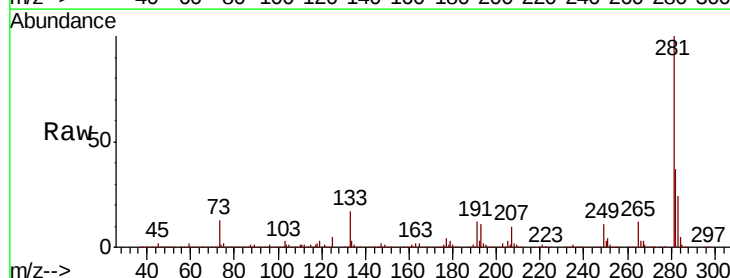
Tgt Ion: 119 Resp: 238005

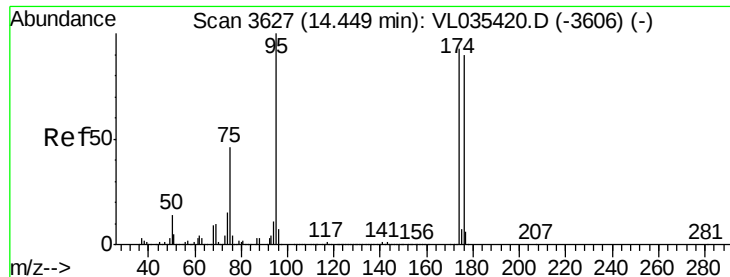
Ion Ratio Lower Upper

119 100

91 3.6 72.0 108.0#

134 22.7 15.7 23.5





#68

1-Bromo-4-Fluorobenzene

Concen: 10.562 ppbv

RT: 14.45 min Scan# 3627

Delta R.T. 0.01 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

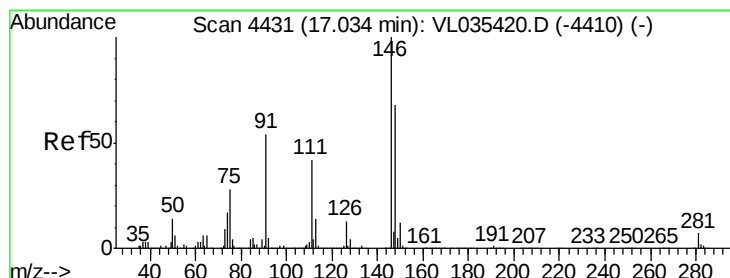
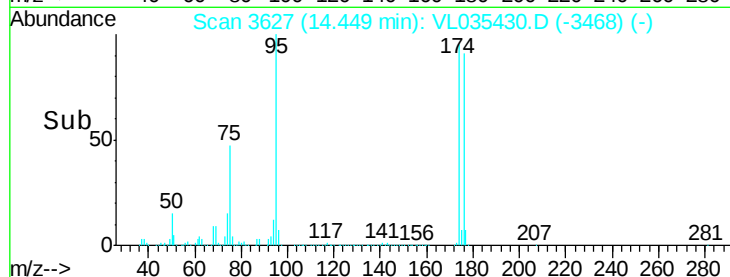
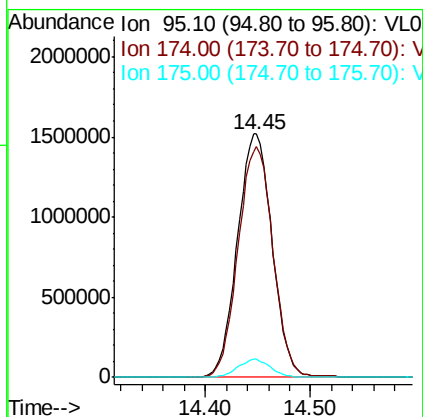
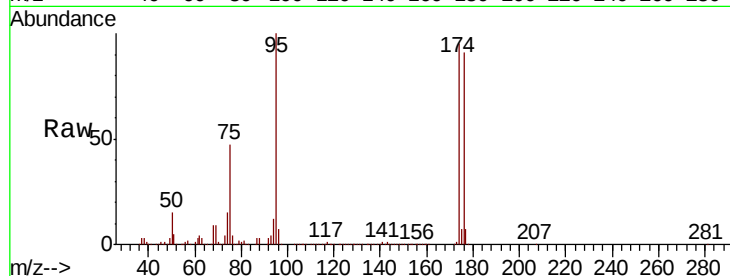
Tot Ion: 95 Resp: 3467994

Ion Ratio Lower Upper

95 100

174 95.6 44.0 66.0#

175 7.0 3.2 4.8#



#75

1,3-Dichlorobenzene

Concen: 24.344 ppbv

RT: 17.18 min Scan# 4476

Delta R.T. 0.15 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

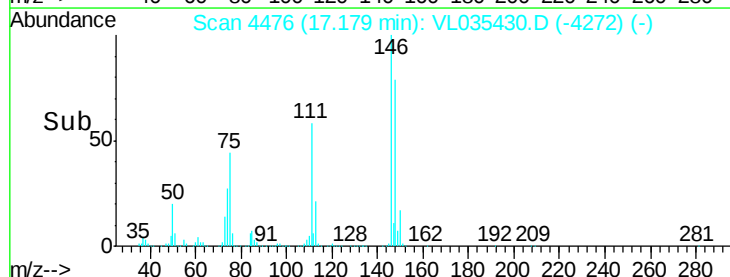
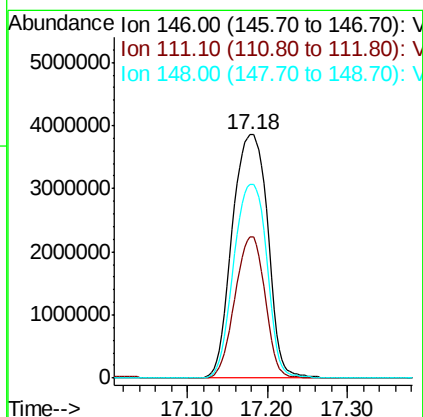
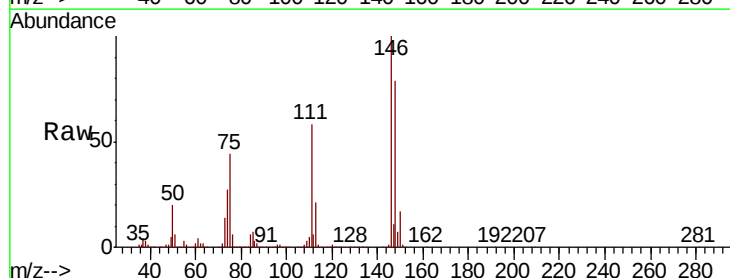
Tgt Ion: 146 Resp: 11604407

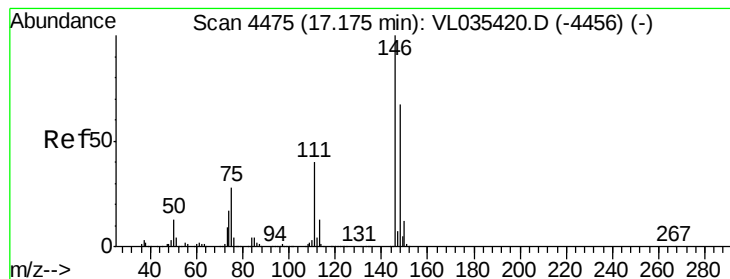
Ion Ratio Lower Upper

146 100

111 49.1 25.6 76.8

148 74.6 32.3 96.9





#76

1,4-Dichlorobenzene

Concen: 24.703 ppbv

RT: 17.18 min Scan# 4476

Delta R.T. 0.01 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

Instrument :

MSVOA_L

ClientSampleId :

E053-1100

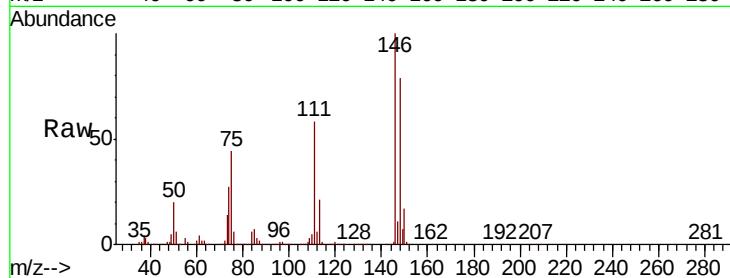
Tot Ion:146 Resp:11604407

Ion Ratio Lower Upper

146 100

111 49.2 24.8 74.4

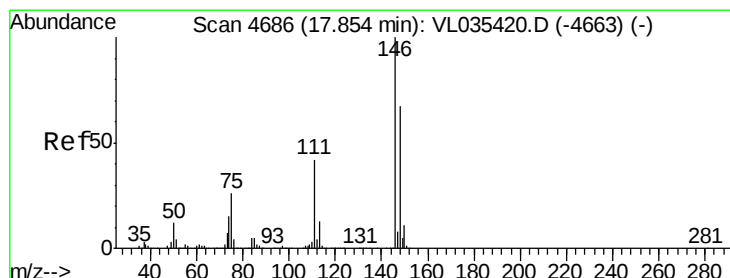
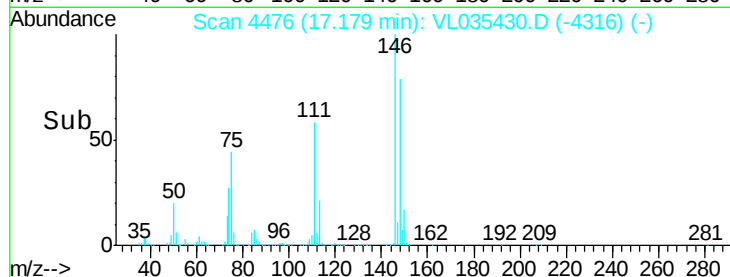
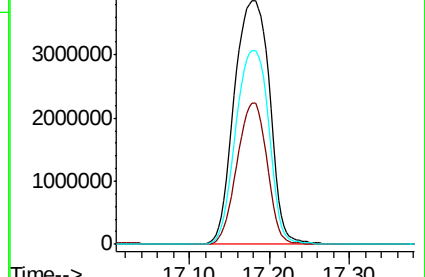
148 74.6 32.1 96.3



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#77

1,2-Dichlorobenzene

Concen: 24.332 ppbv

RT: 17.86 min Scan# 4688

Delta R.T. 0.01 min

Lab File: VL035430.D

Acq: 17 Aug 2020 23:47

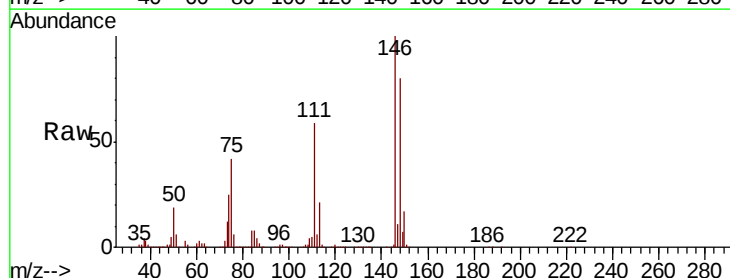
Tgt Ion:146 Resp:11360478

Ion Ratio Lower Upper

146 100

111 50.9 26.3 78.9

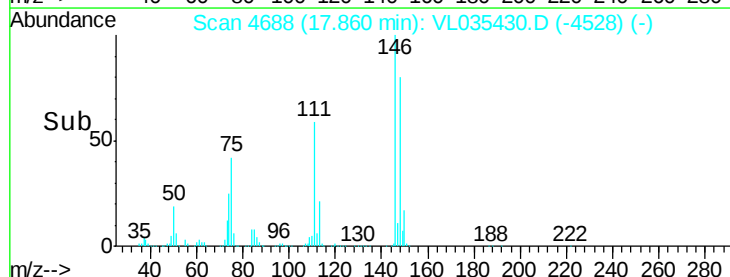
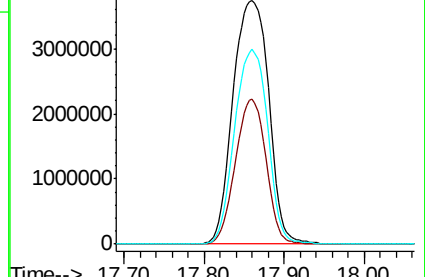
148 74.0 32.0 96.0

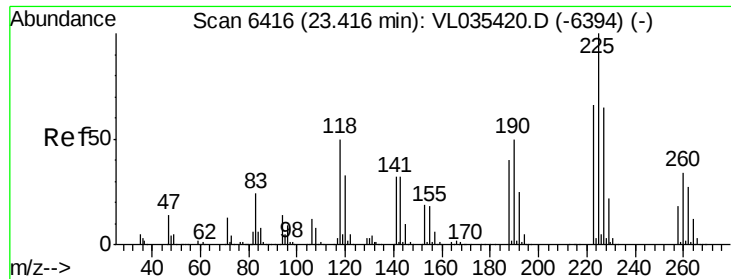


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

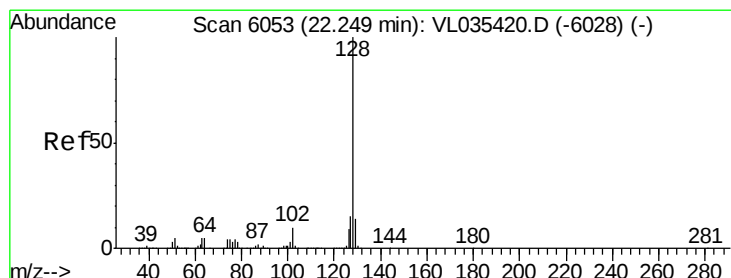
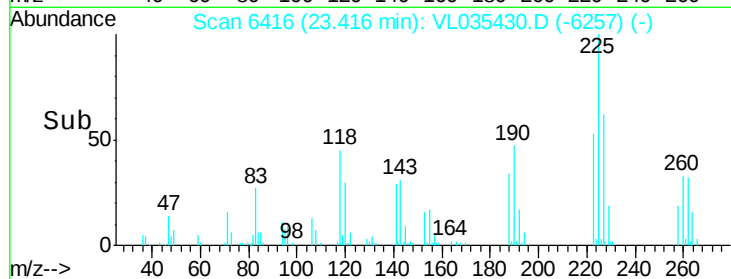
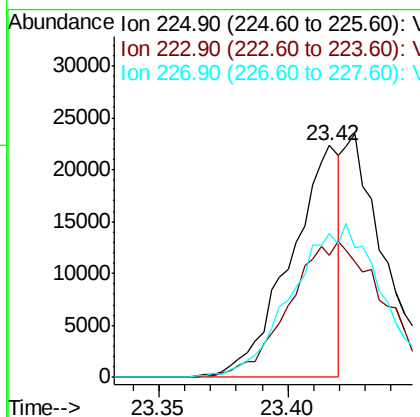
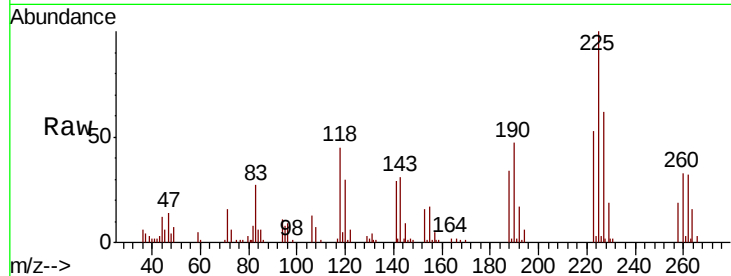




#78
Hexachloro-1,3-Butadiene
Concen: 0.080 ppbv
RT: 23.42 min Scan# 6416
Delta R.T. 0.01 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

Instrument :
MSVOA_L
ClientSampleId :
E053-1100

Tot Ion:225 Resp: 29621
Ion Ratio Lower Upper
225 100
223 0.0 50.3 75.5#
227 0.0 51.0 76.6#



#79
Naphthalene
Concen: 0.033 ppbv
RT: 22.26 min Scan# 6055
Delta R.T. 0.02 min
Lab File: VL035430.D
Acq: 17 Aug 2020 23:47

Tgt Ion:128 Resp: 28416
Ion Ratio Lower Upper
128 100
127 12.9 11.4 17.0
129 11.3 9.5 14.3

